

International Security Printers Visit

On 24 June 2015, 24 Friends visited the new premises of stamp printer ISP. Most had arrived in Wolverhampton the night before and met-up the next morning in the hotel reception promptly at nine following breakfast and checkout ready for the short journey to the factory.

Company Background

Founded as Walsall Lithographic in 1894, its first stamps appeared in 1963. Walsall Security Printers (WSP) was created as a separate company in 1966 to concentrate on stamp printing. WSP purchased Courvoisier of Switzerland in 2001, transferring production into Walsall. In 2004 it acquired Cartor Security Printing of La Loupe, France, from where it still trades, subsequently moving Courvoisier production to France before later retiring the brand name.

ISP was established in 2004 to head-up these trading companies, offering the services and combined resources of both plants, while continuing to use the Walsall and Cartor brands to this day. In 2008 Paul White and Ian Brigham (now joint managing directors and hosts for our visit) undertook a management buy-out of ISP. They were the ideal choices, as they have spent most of their careers in the security printing industry.

Stylish new premises

In 2012 a decision was taken to move from the West Midlands town of Walsall, its home for 120 years, as existing space was tight and access difficult. ISP's new home at i54, an Advanced Manufacturing Site near Wolverhampton and under 20 minutes from Walsall, ensured retention of the 80 highly-skilled and motivated employees. It was opened by Her Majesty The Queen, accompanied by the Duke of Edinburgh, on 30 October 2014, amid much fanfare and international media coverage.

The new factory is both impressive and stylish, comprising 70,000ft² with capacity for expansion by a further 30,000ft². Incidentally, there is a misconception among some in

philately that ISP no longer intends using the Walsall and Cartor brand names, but this is not currently the case.

After the initial security checks prior to entry, where our passports or driving licences were scanned by security staff and name badges issued, there was an introduction and refreshments, after which it was time to see where more of the £8 million investment across the four production areas had gone.

There are four temperature and humidity controlled areas: (1) the **print room**, offering gravure and litho production; (2) a **die-cutting** area for self-adhesive stamps; (3) a **philatelic bureau and fulfilment** area preparing collector and retailer items, and (4) a **finishing and inspection** area.

1) The print room. A new £2 million Cerutti R981 gravure press, capable of handling reels up to 31.5 inches wide, runs at up to 1,150 feet per minute. A two-sided self-adhesive stamp booklet of a new design that at the time of our visit had not been announced by the issuer was on-press, with production of 1.5 million per hour achievable, containing some 18 million stamps. This 10-unit press offers 100% quality control and inspection and can slit the reel ready for subsequent die cutting and finishing.

This press was directly installed into a dedicated print room at the new premises. An early practical completion of the press room some three months earlier was factored into the build schedule so that the press could be fully constructed and be operational by the end of September which would then coincide with the rest of the plant being relocated from Walsall. Its first production job was a multimillion product run of Horizon labels which are the large gold self-adhesive Machin Head labels used by Royal Mail to affix to parcels.

The Cerutti is joined by the existing 10-unit Müller Martini A52 offset press with kiss-cutting, UV drying and sheeting, which was printing the presentation pack folder for a forthcoming Royal Mail stamp issue on the day of our visit.

2) Die-cutting. Die-cutters slice through the surface of the stamp paper, without going through the backing paper, and then 'matrix strip' (i.e. remove) the waste area around each stamp. Two camera systems detect missing stamps accidentally lifted by the stripper, diverting spoiled from good stock without human intervention. Booklets are separated into singles, folded, counted into 50s, cello-wrapped and bar-coded before check-weighing, boxing into 1,000s, labelling and re-weighing.

3a) Philatelic bureau. Products are created for growing numbers of administrations. Stamps destined for FDCs are affixed by machine and cancelled, while 'packs' of all kinds are created on-site by equipment that lifts the carrier strip and inserts each stamp automatically.

3a) Fulfilment. ISPs bureau now processes data for collector orders for PostNL and Dutch retailers, using picking and packing lists, with ordered items taken from stock. Packing and prompt despatching of thousands of daily orders ensures next day delivery in Holland.

4) Finishing and inspection. At one time, QA checks would always have been undertaken manually and, due to something called 'persistence of vision' (the theory where an after-image is thought to persist for approximately one twenty-fifth of a second on the retina), would enable the slightest difference between sheets to be noticed by the checkers. Traditionally this operation would have been undertaken by women as it is thought that they possess this phenomenon in greater measure than men.

Some staff were seen inspecting stock, sheet by sheet, while others were individually checking for correct application of bamboo to the surface of a stamp sheet for one of their clients. Perfection was expected, so manual checking was essential, in fact no machine could currently do this work.

While manual checking is still employed, ISP primarily uses an automated inspection system using software developed with Apollo Systems USA. Powerful computers work in tandem with software algorithms to spot differences, pixel by pixel, between entire press sheets at printing resolutions up to 1200 line screen and speeds of 10,000 sheets an hour.

A number of manually inspected perfectly printed and clean sheets are 'learnt' by the software and become the master from which differences will be matched on inspection. Cameras then check for problems within pre-programmed tolerances. With full audit trails, this kit, which is unique to ISP, rapidly became indispensable.

...and finally

With more than 70% of ISPs total stamp output destined for overseas, including key stamp contracts in Europe, Japan and Taiwan, the company is already a major export success and clearly has a bright future at its new site.

With our visit now over, thanks were offered to Paul and Ian for their hospitality. While waiting for the group to assemble for the photograph shown here to be taken outside the premises, Paul explained the thinking behind the facade. He explained that the distinctive low profile building has an aluminium rain screen system designed to represent colour build-up, while a louvered 'brise-soleil' feature at the entrance canopy imitates the stacking of stamp sheets. The use of wooden textures and pebbles with water features allude to the raw materials used in the printing process.

All are subtle touches indicative of the great care and attention taken by the architects and builders, which Friends reflected on as they went their separate ways. Report by **Glenn H Morgan**.